

object is moving over the GUI, moving the expanded area in accordance with the moving object. Moreover, the method includes if the object is no longer sensed, maintaining the expansion of the expanded area in the last sensed location for a predetermined amount of time.

[0013] The invention relates, in another embodiment, to a computer implemented method. The method includes displaying graphical information. The method also includes detecting an object over the graphical information. The method further includes visually expanding portions of the graphical information in close proximity and underneath the detected object.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The invention will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

[0015] **FIG. 1** is an expansion method, in accordance with one embodiment of the present invention.

[0016] **FIG. 2** is an expansion method, in accordance with one embodiment of the present invention.

[0017] **FIG. 3** is a touch based selection method, in accordance with one embodiment of the present invention.

[0018] **FIG. 4** is a touch based method, in accordance with another embodiment of the present invention.

[0019] **FIG. 5** is a touch based method, in accordance with one embodiment of the present invention.

[0020] **FIGS. 6A-6C** are side views illustrating moving expansion, in accordance with one embodiment of the present invention.

[0021] **FIGS. 7A-7C** are top views illustrating moving expansion, in accordance with one embodiment of the present invention.

[0022] **FIG. 8** is a touch based method, in accordance with another embodiment of the present invention.

[0023] **FIG. 9** is a side view showing a GUI in an unexpanded and expanded state, in accordance with one embodiment of the present invention.

[0024] **FIG. 10** is a top view showing a GUI in an unexpanded and expanded state, in accordance with one embodiment of the present invention.

[0025] **FIG. 11** is an expansion method, in accordance with one embodiment of the present invention.

[0026] **FIGS. 12A-12N** illustrate an exemplary expansion sequence, in accordance with one embodiment of the present invention.

[0027] **FIGS. 13A-13D** illustrate an exemplary expansion sequence, in accordance with one embodiment of the present invention.

[0028] **FIG. 14** is a block diagram of a computer system, in accordance with one embodiment of the present invention.

[0029] **FIG. 15** is a flow diagram of expansion processing, in accordance with one embodiment of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0030] Embodiments of the invention are discussed below with reference to **FIGS. 1-15**. However, those skilled in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes as the invention extends beyond these limited embodiments.

[0031] **FIG. 1** is an expansion method, in accordance with one embodiment of the present invention. The method may be implemented on computing devices having a touchscreen display. Touchscreen displays generally consist of a display and a substantially transparent touchscreen that is laid over the display. The display is configured to present graphical information, and the touchscreen is configured to receive touch inputs. The touchscreen may for example be used to perform tracking make selections, issue commands, and controlling interface elements with respect to the graphical information on the display. By way of example, the computing devices may include desktops, laptops, tablets, and handheld computers. The computer devices may also correspond to cell phones, PDAs, media players, consumer electronic devices, and/or the like.

[0032] The method generally begins at block **102** where graphical information is presented on the touchscreen display. This is typically accomplished with the display portion of the touchscreen display. In most cases the graphical information fills the entire display screen, although in some cases it may only fill a portion of the display screen. The graphical information may for example be a graphical user interface (GUI). As is generally well known, the GUI represents, programs, files and operational options with graphical images. The graphical images may include windows, fields, dialog boxes, menus, icons, buttons, cursors, scroll bars, etc. During operation, the user can select and activate various graphical images in order to initiate functions and tasks associated therewith. By way of example, a user may select a button that opens, closes, minimizes, or maximizes a window, an icon that launches a particular program or a link that opens a particular web page. In addition, the user may actuate user interface controls such as a scroll bar to perform scrolling in the GUI. The GUI can additionally or alternatively display non interactive text and graphics

[0033] Following block **102**, the method proceeds to block **104** where a touch is detected over the touchscreen display. This is generally accomplished with the touchscreen portion of the touchscreen display. In most cases, the touch screen recognizes one or more touches, as well as the position and magnitude of touches on its touch sensitive surface.

[0034] Following block **104**, the method proceeds to block **106** where an area or portion of the touchscreen display is expanded proximate the location of the touch. Any portion of the touchscreen display can be expanded. The step of expanding may include visually expanding a portion of the presented graphical information in the region of the touch relative to the remaining portions of the presented graphical information outside the region of the touch. The step of expanding may also include expanding the touch sensitive portions associated with the expanded visual portion. The sensitive portion are points or regions of the touchscreen that are linked to particular points or regions of the graphical